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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,050

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Hidetoshi Konno

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EXAMINER

HUYNH, LOUIS K

ART UNIT

PAPER NUMBER

3721

NOTIFICATION DATE

DELIVERY MODE

03/06/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/573,050	Applicant(s) KONNO, HIDETOSHI	
	Examiner Louis K. Huynh	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/22/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

- “produc” on page 8, line 22, should be corrected to: --produce--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 1, line 9: “the cutting resistance” lacks proper antecedent basis.
- Claim 5, line 8: “the cutting resistance” lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 5 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Harding et al. (US 6,524,230).

- With respect to claim 5, Harding discloses a cutting device that meets all of applicant's claimed subject matter; in particular, the cutting device of

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Harding comprises: a shear force sensor (654h) for sensing or measuring a shear force being exerted by a transverse cutting blade (622) against a crimped strip (522) and then communicate the shear force data to a controller (652) for continuous monitoring (col. 23, line 62 – col. 24, line 16).

- With respect to claim 6, the controller (652) monitors the measured shear force from the shear force sensor (654h) and compare the measured shear force with a predetermined parameter threshold (col. 26, lines 12-17).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kume et al. (US 5,865,015) in view of Harding et al. (US 6,524,230).

- With respect to claim 1, Kume discloses a form-fill-seal apparatus (col. 5, lines 3-16) comprising, among other things, a cutting device comprising a cutter (13), hydraulic cylinders (30) for advancing the cutter (13), a pneumatic cylinder (20) for retracting the cutter; and a pressure sensor (27) for sensing pressure changed in the air supplied to the pneumatic cylinders (20) for the purpose of monitoring abnormal operating condition.

The apparatus of Kume meets most of applicant's claimed subject matter lacks the specific teaching of a resistance measuring means for measuring cutting resistance and outputting a measurement value, and a cutter monitoring means for monitoring the condition of the cutter based upon the measurement value. Harding discloses a cutting device comprising a shear force sensor (654h) for sensing or measuring a shear force being exerted by a transverse cutting blade (622) against a crimped strip (522) and then communicate the shear force data to a controller (652) for continuous monitoring (col. 23, line 62 – col. 24, line 16). It would have been obvious to a skilled person in the art, at the time of the invention, to have modified the apparatus of Kume by having provided a shear force sensor and a controller, as taught by Harding, in order to continuously monitor the condition of the cutter.

- With respect to claims 2-4, the controller of Harding that is used in the modified apparatus of Kume is a universal type programmable controller such as a programmable logic controller (PLC), the configuration and programmability of which is well known to those skilled in the art and is fully capable of accepting operable program codes specific to an operational mode. The specific operational modes recited in claims 2-4 are also well known to those skilled in the art and are executable via preferred logic programs installed in the PLC; thus do not patentably distinguish the claimed invention over the applied prior art.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is cited on form PTO-892 along with the applied references.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The examiner can normally be reached on M-F from 8:00AM to 3:00PM.
10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 22, 2008

/Louis K. Huynh/
Primary Examiner
Art Unit 3721